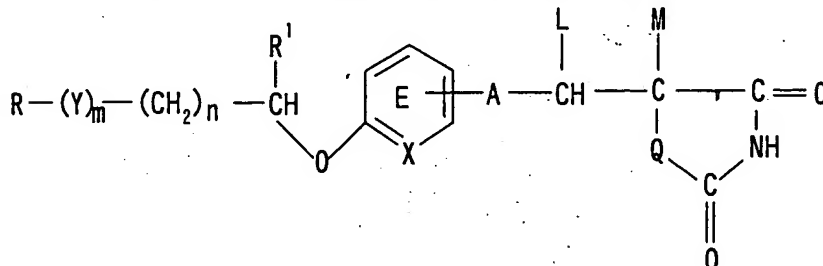


CLAIMS

1. An agent for improving ketosis which comprises an insulin sensitizer.

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2. An agent according to claim 1, wherein the insulin sensitizer is a compound of the formula:



wherein R represents a hydrocarbon group that may be substituted or a heterocyclic group that may be substituted; Y represents a group of the formula -CO-, -CH(OH)-, or -NR³- where R³ represents an alkyl group that may be substituted; m is 0 or 1; n is 0, 1 or 2; X represents CH or N; A represents a chemical bond or a bivalent aliphatic hydrocarbon group having 1 to 7 carbon atoms; Q represents oxygen or sulfur; R¹ represents hydrogen or an alkyl group; ring E may have further 1 to 4 substituents, which may form a ring in combination with R¹; L and M respectively represent hydrogen or may be combined with each other to form a chemical bond; or a salt thereof.

3. An agent according to claim 1, wherein the insulin sensitizer is pioglitazone hydrochloride, troglitazone, rosiglitazone, 4-[4-[2-(5-methyl-2-phenyloxazol-4-yl)ethoxy]benzyl]isoxazolidin-3,5-dione or 5-[[6-(2-fluorobenzyloxy)-2-naphthyl]methyl]-2,4-thiazolidinedione.

4. An agent according to claim 1, wherein the ketosis is diabetic ketosis.

6. An agent according to Claim 1, which is an agent for
5 preventing or treating hepatic glycogenosis, endocrine
diseases, congenital metabolic disorders of carbohydrates
or organic acids, acetonemia vomiting or gastrointestinal
diseases.

8. An agent according to claim 7, wherein the insulin sensitizer is a compound of the formula:



9. An agent according to claim 7, wherein the insulin
30 sensitizer is pioglitazone hydrochloride, troglitazone,
rosiglitazone, 4-[4-[2-(5-methyl-2-phenyloxazol-4-

yl)ethoxy]benzyl]isoxazolidin-3,5-dione or 5-[[6-(2-fluorobenzyloxy)-2-naphthyl]methyl]-2,4-thiazolidinedione.

5 10. An agent according to claim 7, wherein the acidosis is diabetic acidosis.

11. An agent according to claim 7, wherein the acidosis is acidosis caused by a biguanide.

10

12. An agent according to Claim 7, which is an agent for preventing or treating disturbance of consciousness, coma or respiratory diseases.

15 13. An agent for preventing or treating hyperosmolar nonketonic coma, infectious disease, diabetic osteoporosis, diabetic gangrene, xerostomia, lowered sense of hearing, angina pectoris, cerebrovascular disease or peripheral circulatory disturbance, which comprises an insulin
20 sensitizier.

14. An agent according to claim 13, wherein the insulin sensitizier is pioglitazone hydrochloride, troglitazone, rosiglitazone, 4-[4-[2-(5-methyl-2-phenyloxazol-4-
25 yl)ethoxy]benzyl]isoxazolidin-3,5-dione or 5-[[6-(2-fluorobenzyloxy)-2-naphthyl]methyl]-2,4-thiazolidinedione.

15. An agent for improving ketosis which comprises an
30 insulin sensitizier in combination with insulin.

16. An agent for improving acidosis which comprises an insulin sensitizier in combination with insulin.

35 17. Method for improving or treating ketosis in a mammal in need thereof, which comprises administering to said mammal an effective amount of an insulin sensitizier.

18. Method for improving or treating acidosis in a mammal in need thereof, which comprises administering to said mammal an effective amount of an insulin sensitizer.

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19. Method for preventing or treating hyperosmolar nonketonic coma, infectious disease, diabetic osteoporosis, diabetic gangrene, xerostomia, lowered sense of hearing, angina pectoris, cerebrovascular disease or peripheral
10 circulatory disturbance in a mammal in need thereof, which comprises administering to said mammal an effective amount of an insulin sensitizer.

20. Use of an insulin sensitizer for the manufacture of
15 a pharmaceutical preparation for improving or treating ketosis.

21. Use of an insulin sensitizer for the manufacture of
20 a pharmaceutical preparation for improving or treating acidosis.

22. Use of an insulin sensitizer for the manufacture of
a pharmaceutical preparation for treating hyperosmolar
nonketonic coma, infectious disease, diabetic osteoporosis,
25 diabetic gangrene, xerostomia, lowered sense of hearing,
angina pectoris, cerebrovascular disease or peripheral
circulatory disturbance.